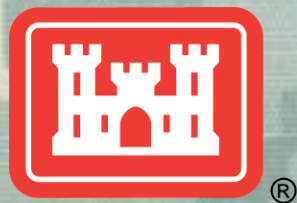


# Tapping *Site Planning and Design*

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Community of Practice Leader  
USACE

**17 June 2010**



US Army Corps of Engineers  
**BUILDING STRONG®**



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# ***Site Planning and Design***

1. How is ***Site Planning and Design*** foundational to sustainable development?
2. What role does the ***Landscape Architect*** play in collaboration with the Architect, Engineer, and Master Planner?



# Quantitative

## LEED 2009 for New Construction and Major Renovations

**100 base points**

(6 possible Innovation in Design and 4 Regional Priority points)

Certified: 40–49 points

Silver: 50–59 points

Gold: 60–79 points

Platinum: 80 points and above

**50 possible points from The Site**







## PROXIMITY HOTEL GREENSBORO, NORTH CAROLINA

**39%** less energy use

**34%** less water use

**87%** construction waste diverted  
from the landfill

### LEED® Facts

Proximity Hotel  
Greensboro, North Carolina

LEED for New Construction v2.2  
Certification awarded October 6, 2008

**Platinum 55\***

Sustainable Sites 12/14

Water Efficiency 4/5

Energy & Atmosphere 16/17

Materials & Resources 6/13

Indoor Environmental  
Quality 12/15

Innovation & Design 5/5

\*Out of a possible 69 points

The information provided is based on that stated in the LEED® project certification documents. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.

# Quantitative

**12 of 55**  
points from  
*sustainable*  
*sites*  
Category



**BUILDING STRONG®**

# Qualitative



**BUILDING STRONG®**



# Qualitative





# The Landscape Architect (LA)





# The Landscape Architect (LA)





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# Washington Mutual Center Green Roof

## Seattle, Washington





# NE Siskiyou Green Street Portland, Oregon



# NE Siskiyou Green Street Portland, Oregon





# NE Siskiyou Green Street

## Portland, Oregon





# **NE Siskiyou Green Street**

## **Portland, Oregon**





# NE Siskiyou Green Street Portland, Oregon





# NE Siskiyou Green Street Portland, Oregon





# NE Siskiyou Green Street Portland, Oregon





# **The Red Ribbon, Tanghe River Park**

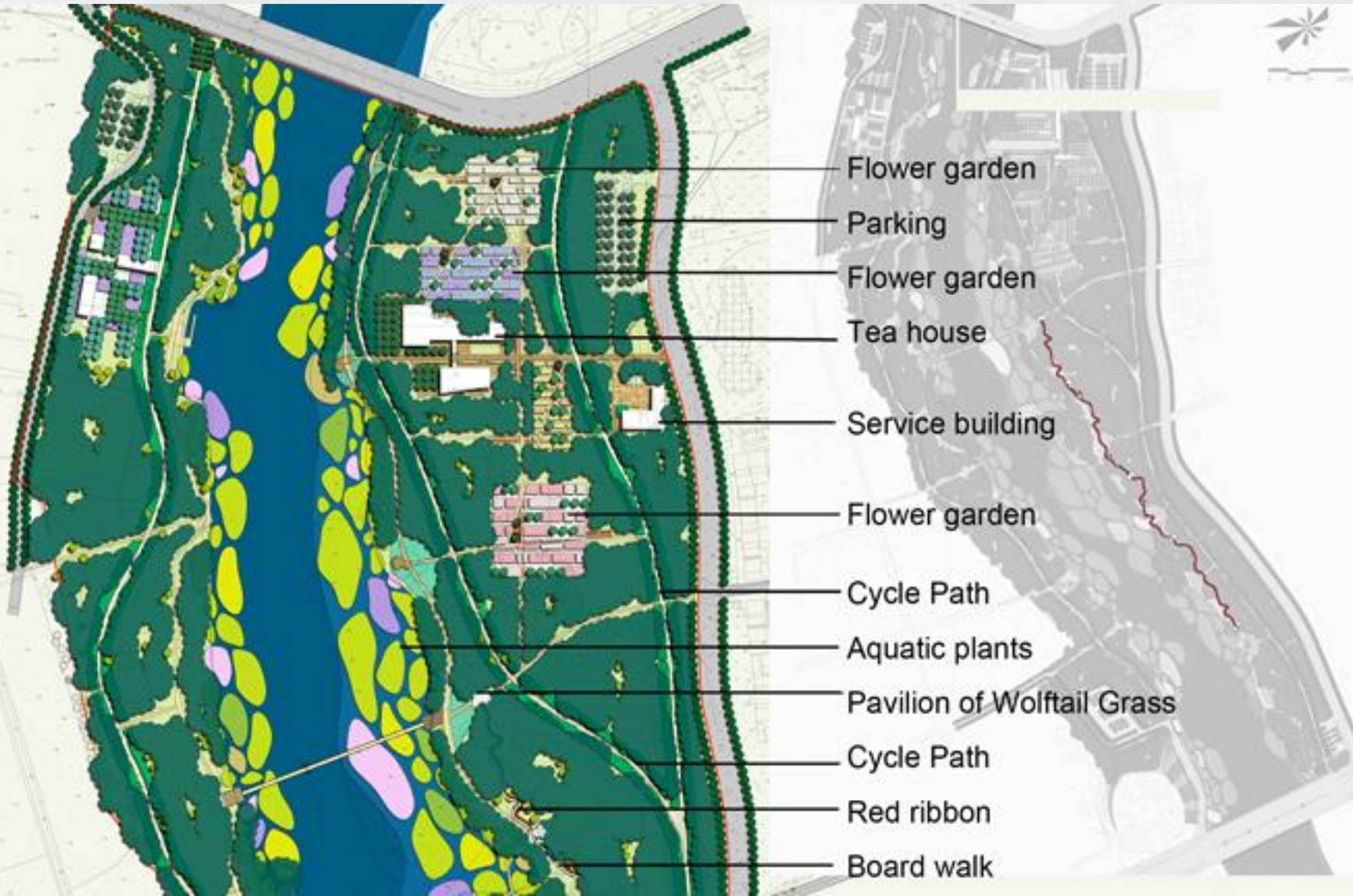
## **Qinhuangdao City, Hebei Province, China**





# The Red Ribbon, Tanghe River Park

Qinhuangdao City, Hebei Province, China





# The Red Ribbon, Tanghe River Park

Qinhuangdao City, Hebei Province, China





# The Red Ribbon, Tanghe River Park Qinhuangdao City, Hebei Province, China





# **The Red Ribbon, Tanghe River Park**

## **Qinhuangdao City, Hebei Province, China**





# **The Red Ribbon, Tanghe River Park**

## **Qinhuangdao City, Hebei Province, China**





# **The Red Ribbon, Tanghe River Park**

Qinhuangdao City, Hebei Province, China





# The Red Ribbon, Tanghe River Park

## Qinhuangdao City, Hebei Province, China





# High Line Park

## New York City, New York





# High Line Park

## New York City, New York





# High Line Park

## New York City, New York





# High Line Park

## New York City, New York





# High Line Park

## New York City, New York





***Site Planning and Design***  
**is foundational to**  
**sustainable development.**



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# REWARDS FOR STEWARDSHIP

When we create sustainable landscapes, the landscapes give back:

Cleaner water and air

Cooler cities

Carbon capture that mitigates climate change

Resource conservation and regeneration

Greater energy efficiency

Habitat conservation and biodiversity

Lower costs and improved performance from stormwater management

Better living conditions



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# LEED Points

## Sustainable Sites

## 26 Possible Points

<input type="checkbox"/> Prerequisite 1 Construction Activity Pollution Prevention	Required
<input type="checkbox"/> Credit 1 Site Selection	1
<input type="checkbox"/> Credit 2 Development Density and Community Connectivity	5
<input type="checkbox"/> Credit 3 Brownfield Redevelopment	1
<input type="checkbox"/> Credit 4.1 Alternative Transportation—Public Transportation Access	6
<input type="checkbox"/> Credit 4.2 Alternative Transportation—Bicycle Storage and Changing Rooms	1
<input type="checkbox"/> Credit 4.3 Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
<input type="checkbox"/> Credit 4.4 Alternative Transportation—Parking Capacity	2
<input type="checkbox"/> Credit 5.1 Site Development—Protect or Restore Habitat	1
<input type="checkbox"/> Credit 5.2 Site Development—Maximize Open Space	1
<input type="checkbox"/> Credit 6.1 Stormwater Design—Quantity Control	1
<input type="checkbox"/> Credit 6.2 Stormwater Design—Quality Control	1
<input type="checkbox"/> Credit 7.1 Heat Island Effect—Non-roof	1
<input type="checkbox"/> Credit 7.2 Heat Island Effect—Roof	1
<input type="checkbox"/> Credit 8 Light Pollution Reduction	1





# LEED Points

## 24 Possible Points

### Water Efficiency 10

<input type="checkbox"/> Prerequisite 1 Water Use Reduction	Required
<input type="checkbox"/> Credit 1 Water Efficient Landscaping	2-4
<input type="checkbox"/> Credit 2 Innovative Wastewater Technologies	2
<input type="checkbox"/> Credit 3 Water Use Reduction	2-4

### Materials and Resources

<input type="checkbox"/> Credit 3 Materials Reuse	1-2
<input type="checkbox"/> Credit 4 Recycled Content	1-2
<input type="checkbox"/> Credit 5 Regional Materials	1-2
<input type="checkbox"/> Credit 6 Rapidly Renewable Materials	1
<input type="checkbox"/> Credit 7 Certified Wood	1

### Innovation in Design

<input type="checkbox"/> Credit 1 Innovation in Design	1-5
<input type="checkbox"/> Credit 2 LEED Accredited Professional	1

